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TITLE : INORGANIC ANTIMICROBIAL AGENT SURFACE-COATED WITH POLYURETHANE RESIN, ITS PRODUCTION AND ANTIMICROBIAL RESIN COMPOSITION

ABSTRACT : PURPOSE: To provide an inorganic antimicrobial agent surface-coated with a polyurethane resin, highly dispersible in a resin when kneaded into a resin, having high heat-resistance, free from discoloration of resin and exhibiting excellent antimicrobial activity.

CONSTITUTION: The surface of inorganic antimicrobial particles is coated with a polyurethane resin by mixing (A) particles of an inorganic antimicrobial agent capable of releasing ion of silver and/or copper (e.g. antimicrobial zeolite, antimicrobial aluminosilicate, a silver salt compound or a copper salt compound) with (B) a polyisocyanate compound, (C) a compound having  $\geq 2$  groups containing active hydrogen and optionally (D) a catalyst. The coated inorganic antimicrobial particle is added in an amount of 0.05-30 wt.% (preferably 0.1-5 wt.%) to a resin to obtain an antimicrobial resin composition having excellent heat-resistance and light resistance.

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